a control voltage supply circuit for supplying an internal control voltage to said variable gain circuit as a gain control signal, wherein

said control voltage supply circuit generates said internal control voltage in response to an external control voltage so as to compensate the linearity of said variable gain circuit to the extent of the external control voltage where said variable gain circuit loses linearity.

2. (amended) The gain control circuit as claimed in Claim 1, wherein

said control voltage supply circuit generates said internal control voltage varying in linearity as against said external control voltage in voltage ranges from a first reference voltage to a second reference voltage, and

the changing ratio of said internal control voltage is set to be larger than the changing ratio of at least in the voltage range that is less than the first reference voltage and the voltage range that is greater than the second reference voltage.

3. (amended) A radio communication apparatus having an amplification means in a transmitting stage for amplifying an intermediate frequency signal and supplying said intermediate frequency signal to a mixing circuit, in which

said amplification means comprising:

a variable gain circuit having a predetermined gain control range; and

a control voltage supply circuit for supplying an internal control voltage to said variable gain circuit as a gain control signal, wherein

said control voltage supply circuit generates said internal control voltage in response to an external control voltage so as to compensate the linearity of said variable gain circuit to the extent of the external control voltage where said variable gain circuit loses linearity.

5. (amended) The radio communication apparatus as claimed in Claim 4, wherein

the control voltage supply circuit generates the internal control voltage varying in linearity as against the external control voltage in voltage ranges from a first reference voltage to the second reference voltage, and

the changing ratio of said internal control voltage is set to be larger than the changing ratio of at least in the voltage range that is less than the first reference voltage and the voltage range that is greater than the second reference voltage.